REMARKS

Introduction

Claims 1-38 are pending. Applicant has amended claims 1, 10, and 17.

In the final Office Action mailed on April 19, 2005, the Examiner rejected claims 1-8, 10-15, and 17-38 under 35 U.S.C. § 101; claims 1-8, 10-15, and 17-37 under 35 U.S.C. § 103(a) over Amazon.com (a collection of prior art cited in PTO-892, Items: U-X), in view of Fast50 (a collection of prior art cited in PTO-892, Items: UU-VV); and claims 9, 16, and 38 over the above references further in view of Official Notice. For the reasons set forth in detail below, applicant submits that the present application, including each of pending claims 1-38, is in condition for allowance.

Rejection Under 35 U.S.C. § 101

The Examiner has reiterated the arguments of the previous office action rejecting claims 1-8 and 10-15 under 35 U.S.C. § 101 as being directed to nonstatutory subject matter, suggesting that they are directed to a process that manipulates an abstract idea. Applicant respectfully disagrees, but has amended these claims to emphasize that these steps occur in a computing system and therefore are not mere abstract ideas. As discussed below, these claims describe technology that produces a useful, concrete, and tangible result as required by case law.

To constitute statutory subject matter, an algorithm only needs to be applied in a useful way. *State Street Bank & Trust Co. v. Signature Fin. Group, Inc.*, 149 F.3d 1368, 1373, 47 U.S.P.Q.2d 1596, 1601 (Fed. Cir. 1998), *cert. denied*, 525 U.S. 1093, 119 S. Ct. 851 (1999). In *In re Alappat*, cited by the Examiner, the court found that producing a smooth waveform display was "a useful, concrete, and tangible result" that rendered the invention in that case patentable. *In re Alappat*, 33 F.3d

1526, 1544. In *Arrhythmia Research Tech. Inc. v. Corazonix Corp.*, the court found that the method claims at issue qualified as statutory subject matter by noting that the steps transformed physical, electrical signals from one form to another form – a number representing a signal related to the patient's heart activity, a non-abstract output. *Arrhythmia Research Tech. Inc. v. Corazonix Corp.*, 958 F.2d 1053, 1060. In *AT&T Corp. v. Excel Communications Inc.*, also cited by the Examiner, the court noted in a finding of patentable subject matter, "AT&T's claimed process employs subscribers' and call recipients' PICs as data, applies Boolean algebra to those data to determine the value of the PIC indicator, and applies that value through switching and recording mechanisms to create a signal useful for billing purposes." *AT&T Corp. v. Excel Communications Inc.*, 50 U.S.P.Q.2d. 1447, 1452. The Examiner cites *Schrader* for the principle that converting one set of numbers into another set of numbers is not statutory subject matter, but in *AT&T* the court notes, "[i]n *State Street*, we held that the processing system there was patentable subject matter because the system takes data representing discrete dollar amounts through a series of mathematical calculations to determine a final share price – a useful, concrete, and tangible result." *Id.* at 1452.

Applicant's technology can be used to gather specific records from a database and display them to viewers of a web page in a way designed to increase the sales of the displayed items. Displaying the items is a useful, concrete, and tangible result. Claim 1 recites "generating a display showing, for at least a portion of the selected items, an indication of the score determined for the selected item." Claim 10 recites "generating a display incorporating at least a portion of the attributed scores and the corresponding items." Claim 17 recites "[o]ne or more generated data signals collectively conveying a display document." Thus, all of the independent claims relevant to this rejection contain the useful step of generating a display that is viewable by a user. Applicant respectfully requests that this rejection be withdrawn.

The Examiner has rejected claims 17-37 under 35 U.S.C. § 101 as being directed to nonstatutory subject matter, indicating that they are directed to signals that manipulate only numbers, abstract concepts, or ideas.

Data signal claims are statutory subject matter if they (1) are manufactured (i.e., not a natural phenomenon), (2) are directed to functional descriptive material, and (3) recite a practical application or cover a specific manufacture. Data signal claims are approved as statutory subject matter by training materials distributed by the USPTO. *Training Materials for the Computer-Related Invention Guidelines*, Tab 11, "Compression/Encryption Examples," Example 13. Those materials include the following example claim:

> A computer data signal embodied in a carrier wave comprising:
> a compression source code segment comprising [the code]; and
> an encryption source code segment comprision [the code].

This example was later cited favorably in a law review article written by the Solicitor of the USPTO, Nancy J. Linck, and co-authored by the Assistant Solicitor of the USPTO, Karen A. Buchanan, who participated in the drafting of the above-referenced training materials. *Patent Protection For Computer-Related Inventions: The Past, The Present, And The Future*, Hastings Communications And Entertainment Law Journal, Vl. 18, No. 4. In that article, the above example was recited as an example of a statutory article of manufacture claim because it recites a specific manufacture. The article also stated that the claim was statutory because it has a practical application in the technological arts in that "it can be used to monitor and control the physical processes in an automated manufacturing plant." *Id.* at pp. 677-678.

Applicant's claims recite a data signal with the practical application of conveying a useful display document. Claim 17 recites "[o]ne or more data signals collectively conveying a display document, the display document comprising: a list of items available via a sales channel . . ." This claim recites data signals that (1) do

not occur naturally, (2) are directed to functional descriptive material, and (3) recite a practical application. Therefore, Applicant respectfully submits that these claims recite statutory subject matter, and respectfully requests that this rejection be withdrawn.

The Examiner has rejected claim 38 under 35 U.S.C. § 101 as being directed to nonstatutory subject matter, indicating that it recites nonfunctional descriptive material.

Data structures embodied in computer-readable media are statutory subject matter. According to M.P.E.P. § 2106(IV)(B)(1)(a):

> [A] claimed computer-readable medium encoded with a *data structure* defines structural and *functional* interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory. (Emphasis added.)

This section explicitly states that such an embodiment is functional. Further, the M.P.E.P defines functional descriptive material as follows, "functional descriptive material consists of data structures and computer programs which impart functionality when employed as a computer component." M.P.E.P. § 2106(IV)(B)(1). Applicant's recited data structure, when employed as a computer component, allows for the useful, concrete, and tangible results discussed in detail above.

Applicant's claimed technology meets the requirements of the above-quoted sections. Accordingly, Applicant respectfully submits that the claimed technology is statutory subject matter and requests that this rejection be withdrawn.

Rejection Under 35 U.S.C. § 103(a)

The Examiner has reiterated the arguments of the previous office action rejecting claims 1-8, 10-15, and 17-37 under 35 U.S.C. § 103(a) as unpatentable over Amazon.com (a collection of prior art cited in PTO-892, Items: U-X), in view of

Fast50 (a collection of prior art cited in PTO-892, Items: UU-VV); and claims 9, 16, 38 as being unpatentable over the above references further in view of Official Notice (regarding computer readable medium). Applicant respectfully disagrees. No motivation exists to combine the cited references and even if combined, the references do not contain all of the limitations of Applicant's claims. Therefore, the Examiner has failed to show a prima facie case of obviousness under 35 U.S.C. § 103(a).

The Examiner appears to attempt to supply the missing motivation by reference to the Examiner's personal knowledge from prior experience. While Applicant holds the Examiner's sales and marketing experience in high regard, mere statements of this experience are inadequate to show a prima facie case of obviousness:

> If the examiner is relying on personal knowledge to support the finding of what is known in the art, the examiner must provide an affidavit or declaration setting forth specific factual statements and explanation to support the finding. See 37 C.F.R. § 1.104(d)(2). M.P.E.P. § 2144.03(C).

Accordingly, Applicants respectfully request that the Examiner either withdraw the rejection or provide an affidavit or declaration as requested.

The Examiner also cites two new references, Robinson and Sanders, in the current office action in support of the asserted skill in the art. These references also fail to supply the missing motivation. Similar to Fast50, these references provide additional examples of informational web sites that track growth (of securities in Robinson, and of companies in Sanders), but these references do not provide a teaching, suggestion, or motivation that they should be combined with Amazon.com to produce a ranking based on a rate of orders designed to promote additional sales of fast-selling items.

The cited Amazon.com articles teach displaying the top-selling items at a merchant site on a web page. The Amazon.com display indicates how well a book is selling compared to other books in a simple ranking from 1 to the total number of books available on the site. Amazon.com does not teach the desirability of placing lower selling items prominently on a web site. Amazon.com also does not teach scoring items by their recent rate of increase in rank, rather than their current rank. There is no suggestion in Amazon.com that combining its teachings with a measurement of growth rate would be desirable to produce an increase in sales.

Fast50 is a technology newspaper web site designed to provide information to those interested in the technology sector about the fastest growing companies in a particular region, presumably to educate their readers on techniques to improve or start their own business. Fast50 tracks the 50 fastest-growing technology firms in the Washington region using five years of revenue data. Fast50's scoring is based on revenue growth of each company, and computes a long-term growth value using the five years of data. Fast50 does not teach anything about selling items. Fast50 is an informational web site, and contains no suggestion that its technology could be combined with a merchant site like Amazon.com to achieve a desirable result.

In contrast, Applicant's technology can prominently display items at a merchant site that, while not necessarily top-selling items, have shown significant recent growth in sales ranking in the hopes that putting these items in front of visitors to the site will increase the sales of these items.

Applicant's technology, unlike Fast50's technology, determines the rank of an item based on the number of orders placed, not based on the amount of revenue generated by that item. Fast50 does not have any concept similar to number of orders placed for the companies that it tracks. Claims 1 and 9 recite "each rank value reflecting the number of orders placed for the corresponding item during the current time period." Claims 10 and 16 recite "a current consumption rank." Claim

17 recites "a quantitative indication of growth in sales rate." Claim 38 recites "the item having a consumption rate."

In some embodiments, Applicant's technology specifically looks for items that are below a current threshold ranking in order to find items that are not today's best sellers. Claims 1 and 9 recite "selecting items having a current rank value that is less than a rank value threshold and for which less than a threshold number of orders were placed during the current time period."

Applicant respectfully submits that there is no suggestion to combine Amazon.com and Fast50 contained within either reference, and even if combined the references fail to contain all of the elements of Applicant's claimed technology. Accordingly, Applicant respectfully requests that this rejection be withdrawn.

Conclusion

In view of the above remarks, applicants believe the pending application is in condition for allowance. Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 50-0665, under Order No. 249768043US from which the undersigned is authorized to draw.

Dated: July 19, 2005

Respectfully Submitted,

By _____

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